

Funding of Research in Librarianship

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Introduction

THIS ARTICLE DESCRIBES funding for research on librarianship during the last twenty years, 1964-84. Specific questions initially framed for exploration within this article include:

1. What were the major funding sources?
2. What were the amounts available for funding of research?
3. What were the priorities and emphases of the funding sources in terms of types of research, subject areas, and methodologies?
4. Are there patterns in terms of the recipients of the funding?
5. Are there other discernible trends in research funding for librarianship?

It was not possible to answer all of these questions for reasons which will be explained. However, partial answers are given and suggestions are made for additional work.

Literature searches on funding for research on librarianship were not very productive. Two yearly sources of information were identified: tables in the *ALA Yearbook* published since 1976 under the topic, "Research,"¹ and an article on "Research on Libraries and Librarianship" published annually in the *Bowker Annual of Library and Book Trade Information* since 1979.² Also used were: the *Library Trends* on "Research in Librarianship"³ and the one on "Research Methods in

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Librarianship''⁴; review articles by Janaske (1975),⁵ Ferguson (1975),⁶ Whitbeck, et al. (1979),⁷ and most importantly, *A Library and Information Science Research Agenda for the 1980s* (1982),⁸ by Cuadra Associates, were used. The annual reports of the Council on Library Resources, 1970-82⁹ were examined, as were *Federal Programs for Libraries* (1979),¹⁰ and the *Directory of Library Research and Demonstration Projects, 1966-1975* (1978).¹¹

Previous Findings

Information on funding for research is scattered as well as scarce. Some can be found in reports of funding organizations, but these agencies are inconsistent in how they report projects funded. In addition, reports of research found in the literature do not always acknowledge funding sources.

In two previous issues of *Library Trends* devoted to research in librarianship, funding did not warrant a major article. However, there were some pertinent comments on the state of funding in each issue. Tauber's introduction to the 1957 issue mentioned funding several times,¹² Shera's review of documentation research described funding;¹³ and Dane also made recommendations concerning funding.¹⁴ In the 1964 issue of *Library Trends*, comments on funding are made in two articles.¹⁵

Ferguson's 1975 report¹⁶ on the dissemination of research in library and information science research noted that research is being done by a number of different agents and funded in several different ways. Ferguson further commented that for the previous two decades, most research had been supported from four sources: federal and matching funds under the Library Services and Construction Act (LSCA, 1956-), the Council on Library Resources (CLR, 1956-), the Office of Education's (OE) Division of Library Programs under Title II-B of the Higher Education Act (HEA, 1965-) and the National Science Foundation's (NSF) Office of Science Information Services (1954-). LSCA was used to support public library projects involving demonstrations of new services and interlibrary cooperation; CLR emphasized projects related to academic and research libraries; OE supported a wide range of activities including major library automation projects; and NSF supported research on applications of computers to improve services for the science and technology community. The 1960s and early 1970s produced tremendous growth in research activities, according to Ferguson.

He reported that the National Science Foundation had a sixfold growth in funding between 1960 and 1974; and that OE's Department of

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Library Programs had total funding under Title II-B of \$21,402,000 from 1967 to 1975. Unfortunately, as Ferguson pointed out, there was no single source which reported all funding for research in librarianship. Though ten research centers were identified by Ferguson in 1975, he noted that many of the centers were less active in the 1970s than in the 1960s.

Also in 1975, Janaske summarized the role and state of federally funded research in librarianship. He emphasized that most projects are not funded exclusively by the federal government, but rather receive multiple sources of funding, including local, municipal, state sources, or private sources. Legislation had provided financial resources with a limited intent. Within the federal government, he identified the agencies that support research for library activities as NSF, the Department of Defense (DOD), the Department of Education and Welfare (DEW), the National Library of Medicine (NLM), and the National Institute of Education (NIE). Because most government-funded research is mission-oriented, reflecting the purposes of each agency, HEA's Title II-B general program of funding to support the improvement of library practice is very important. Janaske acknowledged the confusion between research and demonstration, quoting Shera's definition of research, and then defined demonstration as the "implementation or operation of a new concept, service, or program in an effort to establish a basic premise or hypothesis."¹⁷ However, neither Janaske nor others have tried to separate amounts of monies spent for research from those spent for development projects.

In 1978, Slanker¹⁸ identified the three most important federal agencies funding research in library science: the National Science Foundation, the Office of Education's HEA Title II-B program and the National Library of Medicine. She also identified two new research groups which began operation in 1976: The Centre for Research in Librarianship at the Faculty of Library Science, University of Toronto (the only such research center in Canada); and the Book Industry Study Group, a voluntary association to promote research in and about the industry.

Whitbeck et al.¹⁹ analyzed a limited database of research funded during FY 1976 and identified through published lists of research and development awards, fifty-five instances of awards given by foundations and federal agencies. In addition, Whitbeck surveyed librarians in academic and public libraries through a stratified random sample; and he also surveyed library school faculty (randomly selected from the Association of American Library Schools' membership directory) involved in research (ninety-nine cases). The analysis indicated that most funds

went to support research in technology and library development, with smaller amounts being granted for education and training, planning and development, and institutional cooperation. Though the survey results suggest that most of the research in librarianship is being done in library schools, published lists indicated that educational agencies (e.g., state education departments, higher education boards) received the most institutional grants, followed by library schools and academic libraries. Whitbeck found that for FY 1976, federal agencies were the primary sources of funding, with HEW supporting nineteen grants for a total of almost \$1 million; NSF supporting six grants for \$449,000; and NLM supporting one grant for \$134,600. However, CLR supported thirteen grants, for almost \$900,000; and other foundations supported sixteen grants for almost \$700,000. The results of Whitbeck et al.'s survey of researchers indicated that some type of monetary or indirect support had been awarded to about three-quarters of researcher-respondents in 1976. The review concluded that the "well-funded projects use methods which are only marginally research" and that "support of research in librarianship tends to be scattered, with no single source of funding predominating."²⁰

Garrison,²¹ in an exploration of the state of public library research in the 1970s, classified research projects in three categories and ascribed a dollar value to the total of each type. He found ninety dissertations at an estimated \$2.25 million; forty HEA Title II-B projects, at almost \$4 million; and sixty-three "other" projects at an estimated \$3-plus million. Garrison found that most studies relating to public libraries funded by Title II-B monies were in areas of new services, new ways to deliver services, and studies of new user groups.

The report by Cuadra Associates presenting a *Library and Information Science Research Agenda for the 1980s* summarized funding for research from 1970 to 1980 as follows:

The belief is widely held that funds available for government and other national-level support of [research, development, and demonstration] in the field of library and information science declined sharply during the 1970s. This perception is not altogether accurate. To be sure, the funds available for research that many librarians would consider to be directly relevant to their problems and challenges have been decreasing, whereas the funds for information science (or better, science information) have largely held steady from the one organization—NSF—that provides major support for such research. But the overall picture of funding patterns over this past decade is rather mixed. Some organizations have reduced levels; others have increased them; others display a highly variable pattern of funding, with sharp changes from year to year. Such changes make it

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difficult to assess and describe the status of funding for library and information science.²²

The *Research Agenda* clearly stated the complications involved in trying to draw clear, clean lines between research on the one hand, and development and demonstration on the other, as well as the problems inherent in these distinctions. It also noted the proprietary nature of many studies which are in-house company research to support the development of technology-based information services as distinguished from research conducted, on behalf of the public to enrich the nation's store of knowledge.

The report predicted a certain level of austerity during the 1980s and asserted that any investment in research should have a high payoff. This requires concerted planning and attention to priorities, and to the quality of the research funded. A table in the *Research Agenda* summarizes library and information research funding patterns from 1970 to 1980 for the following funding sources which could provide detailed funding data:

- Carnegie Corporation
- Council on Library Resources
- Department of Education/National Institute of Education
- Department of Education, Office of Libraries and Learning Technology
- National Commission on Libraries and Information Science
- National Endowment for the Humanities
- National Library of Medicine/Extramural Grants Program
- National Library Service for the Blind and Physically Handicapped/Library of Congress
- National Science Foundation, Division of Information and Technology²³

From 1970 through 1980, 600 projects relevant to library and information science were funded by these nine organizations. However, it should be noted that the report's definition of research included demonstration and "desk" projects related to the theoretical basis of information science. The research areas that received the largest amounts of funding (totaling over \$2 million) involved the following subjects:

- generation of information in various disciplines
- computer system design and evaluation
- management
- document representation
- user studies

The *Research Agenda* found that funding was concentrated among less

than a dozen organizations, with a handful supplying most of the monies disbursed for research and demonstration.²⁴

Of the nine major funding sources included in this analysis four have provided more than \$5 million, over the nineteen year period:

National Science Foundation, DIST 1974-1980, information projects	\$33 million
Department of Education, OLLT 1970-1980, library research and demonstration projects	\$10.5 million
National Library of Medicine/Extramural Program 1970-1980, information science and systems research in the health sciences	\$8 million
Council on Library Resources 1970-1980, research demonstration and development, library area	\$5.3 million ²⁴

Foundations, except for CLR, did not fund research during this period but provided funds for development projects and for collection building. The *Research Agenda* project categorized the 600 projects it identified into thirty-two areas of inquiry, identifying for each area the number of different funding sources and level of funding. My examination of the titles of the same studies (especially those funded by CLR, OE's Title II-B funds, and NSF) would indicate that more demonstration and "other" studies were included in these 600 projects than scientific research.

Despite a serious effort to analyze funding sources, the *Research Agenda* report still concludes:

We do not know how much money is now being spent for library and information science research. The total funding provided by the "name" research-sponsoring organizations is probably only a fraction of what is being spent in various public and private organizations for research that is directly relevant to their needs...much of which is never reported in the professional literature...; there is no common agreement on what proportion of total expenditures in any field or in any endeavor should be allocated for research to continue effecting improvements.²⁵

Problems in Analyses of Funding

Definitions

Several problems occurred both in the summaries of funding just described and in the analyses to follow. One is the problem of definitions of research, which Lynch discusses earlier in this issue. Distinctions between scientific research and its relatives (demonstration and development, service/consultation studies, and fact-gathering) could be

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made through a careful analysis of each study's proposal and/or completed report; but it would be a major undertaking to assemble these materials for analysis. That was not done by this author and probably was not done in the reviews just cited. Previous reviewers seemed to accept all funded projects as research—when it seems clear, even by the titles of the projects, that many of them are demonstration and development projects, or involve collection development. Consequently, the total amounts of funds and numbers of projects do not reflect accurately the actual pattern of funding for research. The previous reviewers did comment on the problem; however, their tables and commentary still indicate that they are reporting funding for *research*. The danger these reports present is that it looks as if a tremendous amount of money has been spent for research in library and information science in the 1970s and early 1980s, whereas it is very probable that only a small amount of these funds were expended to support the scientific research which leads to new knowledge.

What is needed is a critical appraisal of each funded project to ascertain whether the project is scientific research as defined by some respected authority such as Shera who explained research as the "answering of questions by the accumulation and assimilation of facts which lead to the formulation of generalizations or universals that extend, correct, or verify knowledge...."²⁶ Earlier work in analyzing a body of papers to ascertain research quality was done by Atherton²⁷ and by Coughlin and Snelson²⁸ and could serve as models.

For this article, using only the information provided by the funding agencies to the *Bowker Annual* and the *ALA Yearbook*, it was not possible to make such distinctions. However, it was possible even by examining just the titles of projects to eliminate a large number of funded projects as demonstration, development, consultative reports, or fact-gathering at a simply descriptive level. Consequently, in the following summary of reports on funding sources, rough approximations are proposed of those projects which might be considered research as compared to other use of monies—such as expenses of individuals attending conferences, support of publications, or support of information meetings.

In dealing with some of the major funding agencies, especially NSF and NLM, another delineation which needed to be made was the identification of projects which had any application to librarianship at all, either theoretical or applied. It soon became apparent either through the titles or by the researcher's affiliation that many of the projects funded by these two agencies were not related to librarianship but were

in the areas of computer science, engineering, theoretical mathematics, medicine, and so on. It does not appear that previous reviewers made these distinctions when reporting funding patterns.

Identification of Sources and Results

Another problem is the lack of clearly-identified sources of funding for research in librarianship. The *Research Agenda* made a significant attempt to do this; however, it does not appear that the authors really identified *research*, as distinguished from its relatives, or that they identified only *studies with application to library and information science*. It is quite possible that this reviewer has fallen into another trap: only those previously identified sources of funding were pursued, whereas additional sources may exist. If each author in this issue had been asked to include an analysis of funding sources for the body of research he or she was reviewing, we might have been able to identify additional funding sources. That was not done for this issue but the idea might be pursued for future issues of *Library Trends*. Even among the sources identified by the *Research Agenda* and other reviews, it is difficult to assess patterns of funding by sources due to changes within government agencies, changes in priorities of legislation and agencies, and inconsistent reporting practices. Dissemination of research results is not always accomplished. For example, it is often difficult to find complete reports of studies funded by CLR.

Major Funding Agencies

This section will review the activity of four major research funding agencies: the Department of Education's HEA Title II-B program, NSF's Division of Information Science and Technology program, NLM's extramural research program under the Medical Library Assistance Act, and the CLR. After a brief historical summary of each agency's activities, some analysis will be provided. Lists of funding amounts, researchers, institutional affiliations, and titles of projects can be found in either the *Bowker Annual* or the *ALA Yearbook*.

Higher Education Act of 1965, Title II-B, Library Research and Demonstration Program

The Library Research and Demonstration Program was initially authorized to award and administer grants and contracts for research and demonstration projects related to the improvement of libraries, training in librarianship and information technology, and for the dis-

semination of information derived from these projects. As of 1981, the program was expanded to include promotion of economic and efficient information delivery, cooperative efforts related to librarianship, the support of developmental projects, and the improvement of information technology. Initially, grants and contracts were given only to not-for-profit organizations such as institutions of higher education or other public or private agencies, institutions or organizations. In 1981, program eligibility was expanded to include profit-making organizations.²⁹

Originally, the program emphasized demonstration rather than research. Robert Klassen, summarizing the first nine years (1967-1976), stated that it, "has developed nationally applicable models of alternative ways to best meet library and information needs...[and] projects to develop new techniques and systems for processing, storing, and distributing information.... The aim is to stimulate developments that can be replicated."³⁰ In 1975, Janaske reported that 221 projects were funded from FY 1967-1974 by the Title II-B program, for a commitment of approximately \$18.7 million. He then described major funding categories during the period.³¹

Garrison's review of public library research in the 1970s identified forty projects funded under HEA Title II-B, with application for public libraries, accounting for an estimated 15 percent of all Title II-B awards, and involving a total of \$7,918,000 in federal funds. Garrison noted that the priorities of this program were more often the result of politics rather than the "perceived needs in the library world."³²

Title II-B has had a hazardous career. Various presidents have proposed elimination of the program several times and appropriations have never reached the level of authorization. Originally funds were given in grants to researchers whose proposed projects fit federal priorities; however, since 1980, only contracts have been awarded; and it seems that this will continue. Appropriations have been extremely low in recent years. For example, in FY 1980, only four projects were funded out of an allocation of \$333,000, with much of the money being awarded to King Research, Inc. (KRI) for the *Library Human Resources: A Study of Supply and Demand* (\$176,151). In FY 1981, only two major contracts were awarded: one to Cuadra Associates for the *National Research Agenda for the 1980s* (\$127,354), and one to Simmons College for *Citizen's Information Needs, Phase 2* (\$56,888).

In FY 1982, only one contract was awarded, to KRI for *New Directions in Library and Information Science Education* (\$243,438). A total of \$240,000 was awarded in FY 1983, three of the awards going to for-profit organizations (one again to KRI), and only one to a researcher

from a library school. In FY 1984, the Department of Education's HEA Title II-B program will continue to conduct directed contract research.³³

It is almost impossible to ascertain which projects funded by HEA Title II-B are research studies and which are demonstration projects and/or evaluative/consultative reports. Program officers have asserted that funds were devoted mostly to demonstration in early years. Though several major studies have resulted from this funding source, the contract research awarded since 1980 probably would not qualify as scientific research. Yearly tables in the *Bowker Annual* summarize funding patterns from 1967 to 1983 and show a range of funding from the high of \$3,550,000 in FYs 1967 and 1968 to a low of \$250,000 in FYs 1981, 1982 and 1983. In 1967, thirty-eight projects were funded while only one to four have been funded annually since 1980. A total of \$4,015,572 was awarded for sixty-eight projects from FY 1977 through FY 1983. This author has identified the following trends after reading recent summaries of this program:

1. Funds are used for a few large contracts rather than many small grants.
2. Funds are designated for one topic determined by its administering office (e.g., librarian competencies; a national agenda for research).
3. Contracts are awarded to for-profit organizations rather than to university and individual researchers.

National Science Foundation

Congress established the National Science Foundation (NSF) in 1950 as an independent agency to promote the progress of science. From 1958 to 1978, support for the NSF's research activities related to librarianship was provided through the Office of Science Information Service (OSIS) with emphasis on access to the world's scientific and technical information. In 1974, Lee Burchinal, head of OSIS, reviewed past activities, emphasizing that much effort was devoted to "strengthening and expanding the science information services of the professional scientific and technical societies,"³⁴ with funds to establish new journals, translation services, major national science information services—such as the Science Information Exchange and LC's National Referral Center for Science and Technology—and funds for development of computerization of science and technology databases. Also, research on basic information science problems was supported.

In 1974, NSF began to stimulate improvements in the scientific and technical information-transfer process through research and development to stimulate needed cost-effective and innovative improvements.³⁵

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In FY 1975, new directions were identified: research on basic information science problems and formulation of theories and mathematical models for information transfer; and a focus on applied research to convert basic findings into prototype developments. In 1978, the Division of Information Science and Technology (IST) was established as a new research division to support basic and applied research to advance understanding of the properties and structure of information and information transfer and to knowledge with application to the design of information systems. Today, the agency supports basic and applied research in information science; preference is given to fundamental and general research and to applied research concerning scientific and technical information. From 1977 through 1983, a total of \$36.3 million was awarded for 391 projects; it could be questioned, however, how many of the projects are closely related to library and information science.

In 1980, Atkinson made a significant comment on the role of NSF in funding for research in librarianship: "Although it still provides the largest amount of funding in these fields of any of the national agencies ...almost all of the investigators in this field are from outside library science. They seem to cluster in the disciplines of psychology and computer and information science."³⁶

The National Library of Medicine

The National Library of Medicine (NLM) has conducted and funded health science information research both intramurally and extramurally.³⁷ Under the authorization of the Medical Library Assistance Act (1965), NLM provides for an extramural program for many purposes, including support for research related to health science communication. There is no easily available source of information on NLM grants before 1976. A table reporting these grants has been published annually since 1977 in the *ALA Yearbook* (with each annual reporting activity of the previous year). These tables show amounts ranging from \$246,000 for new awards in 1982 to over \$5 million for both new and continuing awards in 1978. Because the method of reporting varies from year to year, it is difficult to determine amounts actually available from NLM. That work should be done, however, by someone who has access to a complete file of information on NLM awards. According to information reported in the *ALA Yearbook* from 1978 through 1984, the totals for NLM funding include a total of \$15,818,547 for 119 projects; a later table will suggest how much of this total amount might be considered directly related to library and information science.

In 1980, Williams noted two trends which she felt posed a threat to government institutions that conduct and support information science

research: the decline in funding for information science research and development (both at NLM and NSF), and an accelerating contention between the public and private sectors in the information field. Williams felt that NLM had been a leader in research in this area, and that the questioning by the private sector of the appropriateness of NLM's activities posed a threat to their research program. In the growth of online databases, she contended that the federal government—and NLM and NSF in particular—have paved the way, with examples such as NASA, NTIS, ERIC, AGRICOLA, and MEDLINE.³⁸

Council on Library Resources

On 18 September 1956, the Ford Foundation established the Council on Library Resources, Inc. (CLR) with an initial grant of \$5 million. The Council was to be an independent, nonprofit organization devoted exclusively to library problems. Its purpose would be "aiding in the solution of the problems of libraries generally and of research libraries in particular; conducting research in, developing and demonstrating new techniques and methods, and disseminating through any medium the results thereof; for making grants to other institutions and persons for such purposes; and for providing leadership, and wherever appropriate, coordination of efforts...."³⁹

In its first twenty years, 1956-76, CLR received \$29 million in grants from the Ford Foundation. The first priority during its early years was "the exploration of technological means to solve problems that confront libraries in their service to scholarship and research."⁴⁰ Basic research, characterized by looking at the processes of distribution, organization, storage, and communication of knowledge through libraries, was seen as important. Three crucial areas identified for study were bibliographic access, physical access and administrative arrangements.

Early in its second decade of existence, CLR changed focus and emphasized strengthening management skills of research librarians and developing programs to meet the needs of users. Since 1970, CLR has funded grants of more than \$550,000 to ARL's Office of University Library Management Studies. In addition, "programs in the area of automation, networks, standards, and national library services have over the years consumed 45 percent of available Council funds."⁴¹

The CLR Fellowship Program (1969-), which sometimes supported the research of individual investigators, was suspended following the 1979-80 academic year, though the Council continues to accept research proposals from individuals. Probably not more than one-half

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of these awards were used for research; many were for bibliographic projects, travel and faculty development. However, they have served as an important source of small grants for individual faculty to pursue a scholarly interest.⁴²

In the 1983 *Bowker Annual*, Rosenberg⁴³ reported that CLR, currently supported by a number of foundations, including Andrew W. Mellon and Carnegie, is funding in the following areas: bibliographic services; professional education, training, and research; library operations and services; and library resources and their preservation. In addition, two major programs are maintained: the Bibliographic Service Development Program with a focus on access to bibliographic databases and control of costs; and the Professional Education and Training for Research Librarianship Program (PETREL) which provides small grants to support joint research projects by faculty members and librarians. A goal of the new program in professional education and training is to "raise the quality of and make more pertinent the research related to library matters and increase the involvement of librarians and others outside the profession in the research process."⁴⁴ Gwinn noted that a likely prospect for future funding is "support for research by library educators and others on major issues of direct pertinence to research, library operations and management.

A total of \$6,813,316 for FYs 1976/77 through 1982 has been expended by the Council on Library Resources. Later discussion will suggest what proportion of this amount might be considered research funding.

Review of Major Funding Sources

As stated earlier, it was not possible to distinguish explicitly between *scientific research* and its relatives for this paper; however, it was possible to separate out some of the relatives—demonstration, development, consultation reports—as well as other funded projects such as collection development, travel, conference expenses, and the like. What remained of the studies may or may not be scientific research (the results of the analysis appear in table 1).

In addition to making the distinctions just described, it was necessary to assess whether the study was within the field of library and information science, defined as that body of information taught in schools with the corresponding name. For NSF and NLM, this assessment was especially important, as it was obvious that many of the studies, though they constituted scientific research, were not within this field. If the project was done by a person or persons

TABLE 1
SUPPORT FOR RESEARCH IN
LIBRARY AND INFORMATION SCIENCE—1977-1983

<i>Agency</i>	<i>Total Awards</i>	<i>Awards for Research</i>
NSF	36,300,000 *(391)	5,732,694 *(56)
NLM	15,818,547 (119)	3,569,780 (23)
CLR**	6,813,316 (177)	2,059,745 (13)
HEA Title II-B	4,015,572 (68)	NA
Totals	\$62,947,435 (755)	\$11,362,219 (122)

* Parenthetical numbers represent number of projects funded

** Data not available for 1983

known to be producing work in the field of library and information science. For projects funded by CLR, it was assumed that the work always related to library and information science, and evidence was sought that the project was likely to be research as distinguished from a relative. This was done by judging the titles, using as criteria words which would indicate that the project was something other than research. For HEA Title II-B, no attempt was made to distinguish between research and its relatives because the program was designed to be both research and demonstration. It would be of interest, however, if those funded projects were subjected to the same type of scrutiny.

In table 1, funds available from 1977 to 1983 for research in library and information science are listed separately from the total funding for each agency along with the number of projects funded.

Clearly, this analysis is only preliminary. In order to provide valid and reliable information, it would be necessary to gather complete information on the projects, establish criteria to be used, and have the field of content analysis could be used to ensure that this judging was valid and reliable. That work remains to be done. It seems probable to this writer, however, that the results would not be very different from what is reported here.

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These amounts represent between 16 percent to 30 percent of the total funding of these three sources. Though NSF and NLM appear to be the most important research funding sources in terms of total amounts, their emphases on either scientific information or health sciences information make their funds available only to researchers interested in those areas. The same can be said for CLR with their focus on academic and research libraries. Consequently, even though the HEA Title II-B has been the smallest program, and increasingly so, it has held the most promise for researchers seeking funding for research in other areas of the profession. Since 1980, with contract research only being funded, this program no longer offers that advantage. What seems to be missing are funds for research that an individual or a group within the profession identifies as necessary.

Professional Organizations as Funding Sources

Though professional library and information science organizations do not fund research in any quantity—either in terms of number of projects or actual monies—small amounts are available. Within the American Library Association, the Association of College and Research Libraries (ACRL), for example, established two annual awards in 1982 (with support of the Institute for Scientific Information)—The Samuel Lazerow Fellowship for Outstanding Contribution to Acquisitions or Technical Services in an Academic or Research Library (\$1000) and the Doctoral Dissertation Fellowship (\$1000) in the area of academic librarianship. The Young Adult Services Division (YASD) established the Voice of Youth Advocates (VOYA) Research Award (\$500) in 1982 for annual awards beginning in 1984. Since 1975, the Library Research Round Table (LRRT) has awarded either \$400 or \$500 awards each year to one or two authors of outstanding papers. The J. Morris Jones/Bailey K. Howard/World Book Encyclopedia, ALA Goals Award of \$5000 partially supported a substantial study by Leigh Estabrook and Kathleen Heim, entitled “A Pilot Profile of the Women Members of the American Library Association.” This was sponsored by ALA’s Committee on the Status of Women in Librarianship (COSWL).

The Association of Library and Information Science Education (ALISE), formerly the Association of American Library Schools (AALS) began in 1978 to offer one or two grants (for a total of \$1500-\$2500) to support research proposals broadly related to education for librarianship and information science, under their Research Grant Awards. Beginning in 1983, ALISE has also offered up to three awards of \$100

each in their Doctoral Students' Dissertation Competition Awards, and up to two awards of \$500 each in a Paper Competition for research on any aspect of librarianship and information studies. Their total program of research awards in 1984 amounted to research funding up to \$3800. Support for research has become a priority of the organization and it is reflected in their goals, objectives and budget.

The American Society for Information Science (ASIS) in cooperation with the Institute for Scientific Information offers a dissertation scholarship of \$1000 to foster research in information science. Recently, the *ASIS NEWS* (February 1984) announced a recommendation of their Research Committee to bestow an annual research award.

The Special Libraries Association (SLA) formerly sponsored a Grants-in-Aid program that supported research projects carried out by units of the association, individuals, or groups. From 1974 to 1980, six projects were funded for a total of approximately \$4000, but by 1981 that program was discontinued. In 1983, SLA established a Special Programs Fund with grants to encourage programs and services that further the scientific, literary, and educational purposes of SLA, for a total of \$5000. These projects may be research-oriented.

Problems and Recommendations

Wilson⁴⁵ has identified three categories of barriers to research in library schools: time, money and personnel. She also suggests several difficulties in depending on funding by the federal government and by state library agencies: a reduced amount of money, scattered sources (making it difficult to identify appropriate sources), and the fact that these agencies have priorities which impose conditions or constraints on research, making the funds unsuitable for some faculty members and uninteresting for others. Wilson feels that there is a perception of bias in the awarding of federal money, and that state library agencies which have federal funds at their disposal through LSCA monies often lack interest or knowledge about research and have a greater interest in demonstration projects. Another major problem Wilson identified is that researchers in library and information science graduate programs must compete for internal funds, often finding it difficult due to the lack of a research tradition in the field.

Hewitt has delineated a problem that has been apparent in several studies completed by for-profit organizations under contract research:

Many research questions in the field of librarianship...present extremely difficult problems of research design and methodology.

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The effect of underrating the complexity of library research is most profound on contract studies,...because after the contract is awarded and the budget and schedule set, it is difficult to renegotiate.⁴⁶

Hewitt also highlights a related problem, that of the tendency to take on research questions without the proper background work, producing a hybrid, partially a research study and partially a consulting report. "Perhaps an even greater danger of the tendency to couple research and consulting is that the methods and standards of consulting have tended to invade research. The methods of research should be much more rigorous than those of consulting and the standards much higher."⁴⁷ Though this may not appear to be a funding issue, the large numbers of contracts awarded to consulting firms rather than to known researchers does make it a pertinent problem.

Several recommendations are appropriate, based on the findings of this review. First, it is obvious that all areas of library practice need an organization such as the Council on Library Resources which will promote studies leading to improvements for practice. Though the research and university setting (the focus of CLR funding) is an important one, public and school libraries are equally vital to an information-rich public in the future. An organized, funded and well-planned effort needs to be made for the improvement of library services for all age groups. Though the *Research Agenda* has identified high-priority areas of needed research, the federal government and other funding agencies still need to be sold on programs for research in these designated areas and other areas. Hannigan, in a 1983 paper on library education, pinpoints a problem of research funding, and suggests a solution:

I believe that we need monies, and I mean large chunks of money, to establish the kind of research environments that exist in some other disciplines and then to test the relationship of that environment to the quality of education provided within it. I would like to see grants that require a large scale commitment to research in a given institution rather than continued funding of "loner" concepts.⁴⁸

Second, it is suggested that the major areas of needed research will continue to be defined, in addition to, and as part of a reassessment of the five *Research Agenda* priority areas. This should be done by professional organizations and scholars in each area of the field. Third, a nationwide effort should be made to secure funding programs, through the leadership of professional organizations, possibly in coordination with the National Commission on Libraries and Information Science. The recommendation made in the 1957 issue of *Library Trends*—the need to have coordination for a program of research in librarianship—is

still valid and remains to be accomplished. Fourth, it is important that faculty scholar-researchers be given a fair share of research grants and contracts in their areas of expertise in order to push forward the knowledge base of this practice-based field, and so that library and information science faculty take their rightful positions as scholars and serious researchers at their universities.

Further Questions to Explore

This exploratory effort to assess the adequacy of funding for research for librarianship has raised several additional questions which need to be addressed:

1. How many of the HEA Title II-B-awarded projects are research-based compared to demonstration and development?
2. How many of CLR's funded projects can be considered scientific research?
3. How many of the studies funded by NSF's IST program and NLM's extramural program are research with applications (either theoretical or practice-based) for libraries and information centers?
4. How much of faculty research emanating from graduate library and information science schools is funded either in-house or with outside funding? What are the sources, amounts of funding, and subject areas? Has the presence or absence of research centers within those schools contributed to the funding or lack of funding?
5. How many doctoral dissertations are funded, in comparison to those not funded? What are the funding sources, amounts and preferred subject areas?

Lynch has argued earlier in an unpublished report cited in the *Research Agenda*: "None of us would argue that research in our field is adequate to the need....But, respectable research can be done without 'major funding.' While we are looking for major funding, we need to remember that and act accordingly."⁴⁹ However, Janaske has suggested that funding for research is important if that research has any urgency because: "Many of the projects funded as research and demonstration could have been done without federal support, but it might have taken ten to twenty years longer to get the job done."⁵⁰

Our time may be running out because of the urgency of researchable questions related to libraries and information services for all publics. It is time for leadership and coordination of funding for research in library and information science.

Funding Research in Librarianship

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